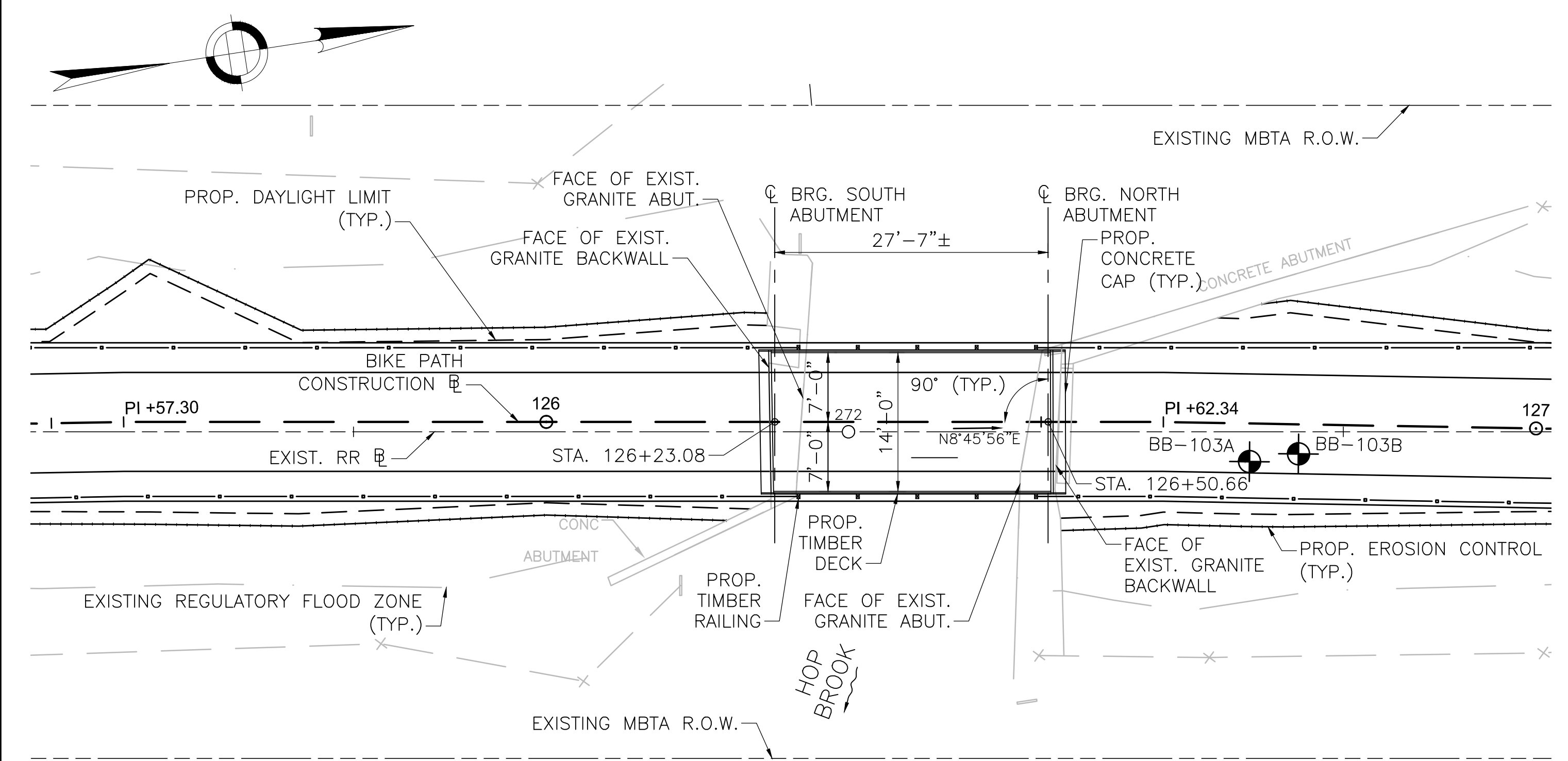
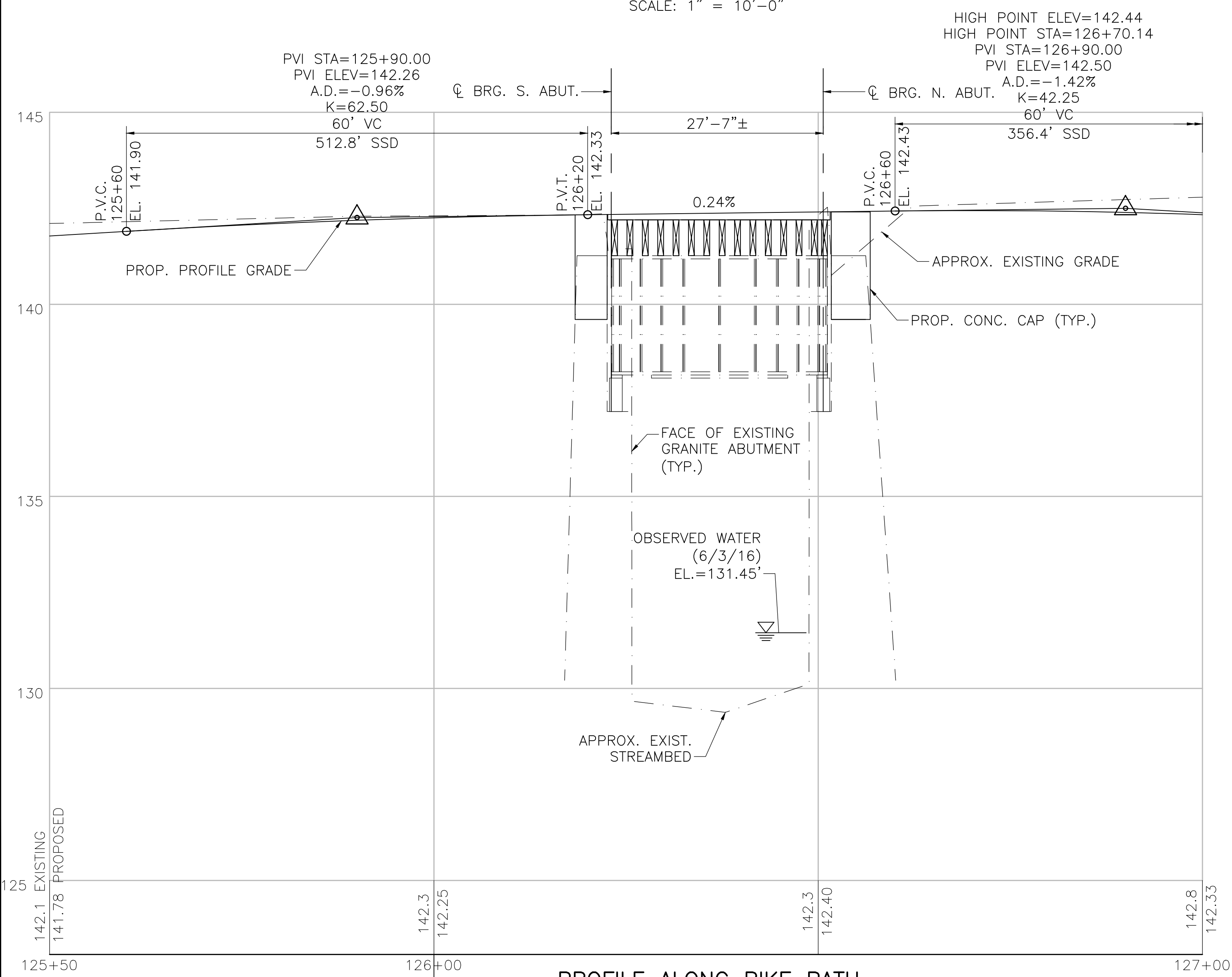


LOCUS PLAN
SCALE: APPROX. 1" = 1200'

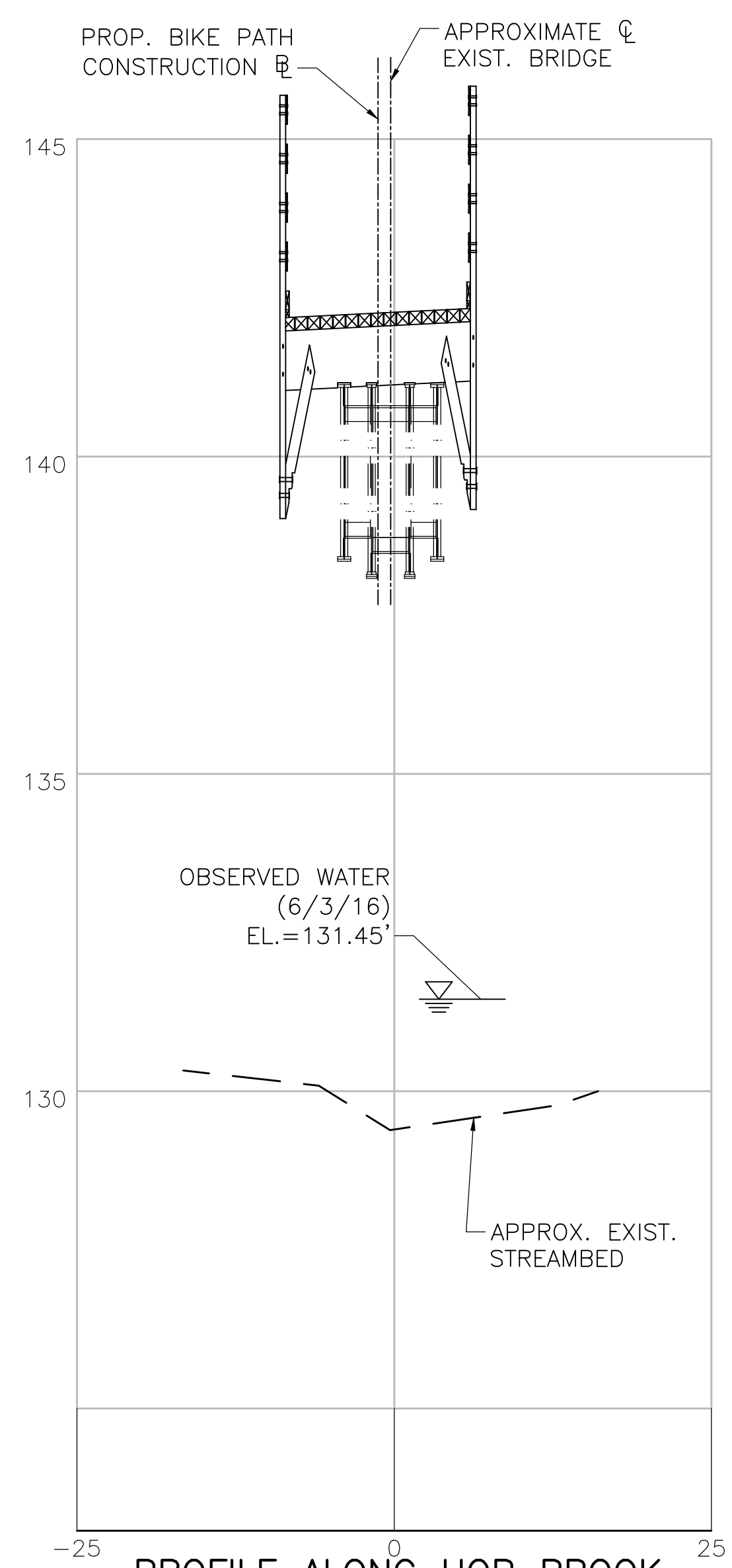
GENERAL NOTES		
PROJECT FILE NO.:	608164	
PROJECT DESCRIPTION:	PROPOSED BRIDGE	
BRIDGE DESIGN LOADING:	H10	
SURVEY:	SURVEY INFO	
ELEVATION REFERENCE:	NAVD OF 1988	
TRAFFIC DATA		
	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	N/A	
AVERAGE DAILY TRAFFIC - PRESENT	N/A	
AVERAGE DAILY TRAFFIC - DESIGN YEAR	N/A	
DESIGN HOURLY VOLUME	N/A	
DIRECTIONAL DISTRIBUTION	N/A	
TRUCK PERCENTAGE - AVERAGE DAY	N/A	
TRUCK PERCENTAGE - PEAK HOUR	N/A	
DESIGN SPEED	18 MPH	
DIRECTIONAL DESIGN HOURLY VOLUME	N/A	
BENCH MARK: #5 CHISEL SQUARE FOUND FEMA RM 6-1 EL=141.73'		



KEY PLAN
SCALE: 1" = 10'-0"



PROFILE ALONG BIKE PATH
HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 2'-0"




PROFILE ALONG HOP BROOK
HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 2'-0"

DESIGN


IN ACCORDANCE WITH THE 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

NOTES:

- APPROVAL DOES NOT INCLUDE STRUCTURAL ANALYSIS.
- DIMENSIONS OF STRUCTURAL MEMBERS ARE APPROXIMATE, AND WILL BE FINALIZED DURING THE FINAL DESIGN PHASE.
- SEE GEOTECHNICAL REPORT, DATED OCTOBER 2019.
- SEISMIC DESIGN CRITERIA:
DESIGN RETURN PERIOD: 1000-YEAR
DESIGN SPECTRA:
A_S = 0.11
S_{D5} = 0.23
S_{D1} = 0.09
SITE CLASS = D
SEISMIC DESIGN CATEGORY (SDC) = A
- HYDRAULIC REPORT NOT REQUIRED FOR THE MODIFICATION OF SUPERSTRUCTURE.
- NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.



120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON MA, 02116



Highway Division

**SKETCH PLANS OF PROPOSED
BRIDGE REHABILITATION
SUDBURY**

PROPOSED BIKEPATH
OVER HOP BROOK

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

APPROVED BY	DATE
STRUCTURAL ELEMENTS:	
TITLE:	
HIGHWAY ELEMENTS:	
TITLE:	

XXXXXX_BR(S31007).DWG Plotted on 25-Nov-2019 5:57 PM XXXXX Sketch Plans Submittal (SP#) DD-Month-YYYY

BORING NOTES:

1. LOCATION OF BORINGS SHOWN ON THE PLANS THUS: BB-#
2. BORINGS ARE TAKEN FOR PURPOSE OF DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY, BUT DO NOT NECESSARILY SHOW THE NATURE OF THE MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION.
3. WATER LEVELS SHOWN ON THE BORING LOGS WERE OBSERVED AT THE TIME OF TAKING BORINGS AND DO NOT NECESSARILY SHOW THE TRUE GROUND WATER LEVEL.
4. FIGURES IN COLUMNS INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE A 1 1/8" I.D. SPLIT SPOON SAMPLER 6" USING A 140 POUND WEIGHT FALLING 30".
5. ALL BORINGS WERE MADE IN SEPTEMBER 2019.
6. BORINGS WERE MADE BY NEW ENGLAND BORING CONTRACTOR, INC., P.O. BOX 165, DERRY, NH 03038.
7. THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS USED THROUGHOUT.

LOG OF TEST BORING

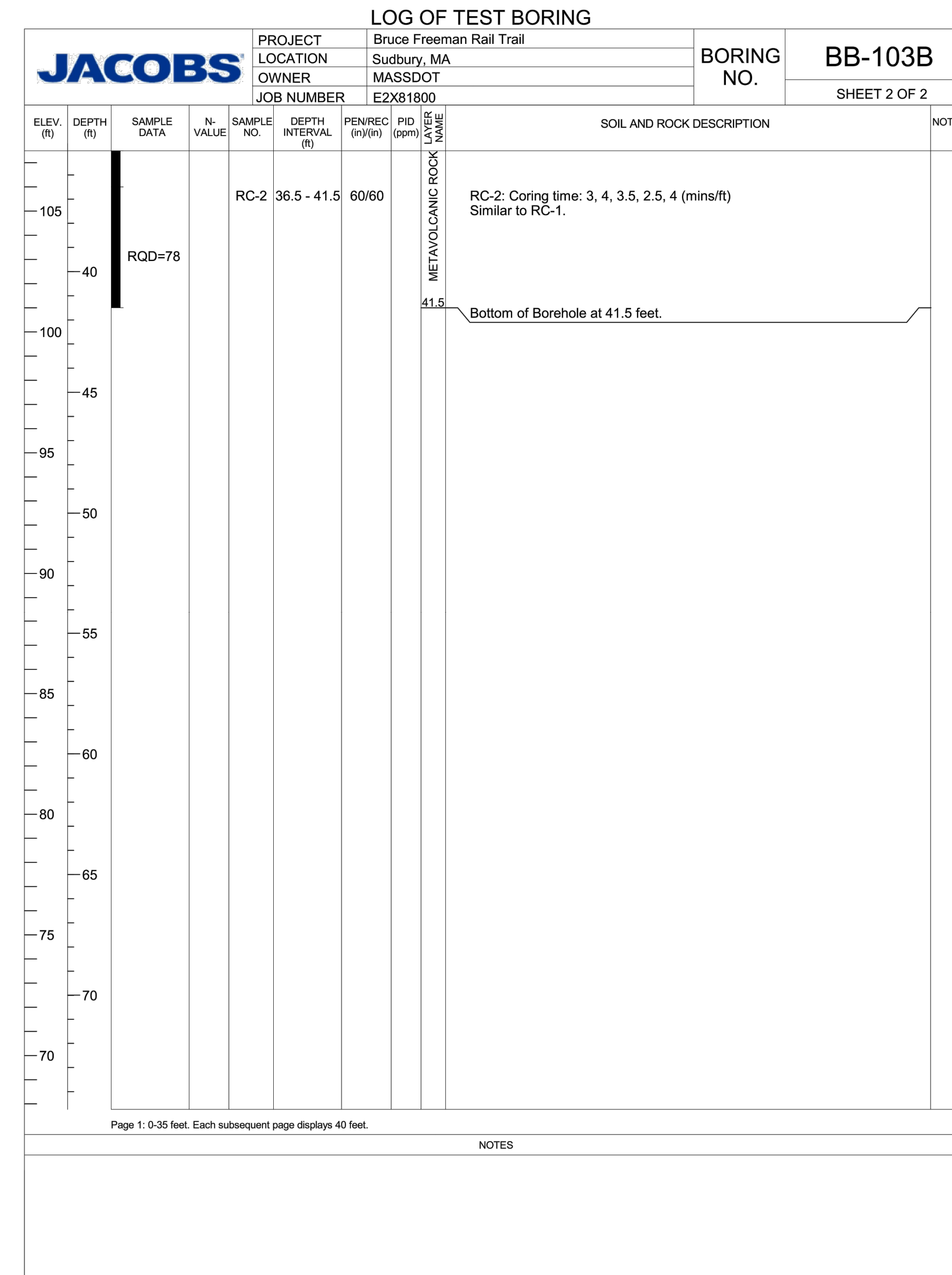
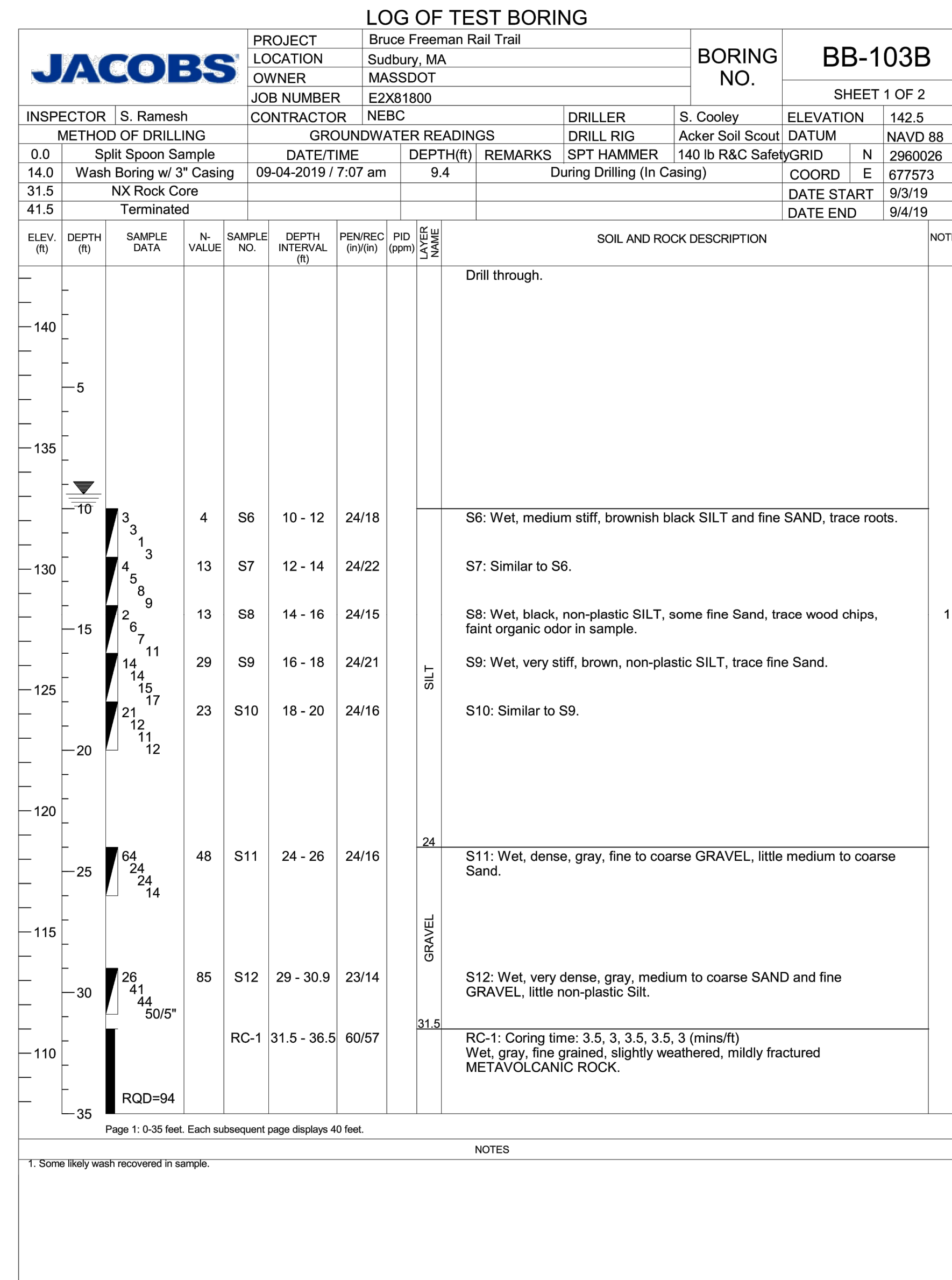
JACOBS		PROJECT Bruce Freeman Rail Trail		BORING NO. BB-103A	
LOCATION Sudbury, MA		OWNER MASSDOT		SHEET 1 OF 1	
JOB NUMBER E2X81800		CONTRACTOR NEBC		DRILLER S. Cooley	
INSPECTOR S. Ramesh		GROUNDWATER READINGS		ELEVATION 142.5	
METHOD OF DRILLING Split Spoon Sample		DATE/TIME 09-03-2019 /		DRILL RIG Acker Soil Scout	
Terminated		DEPTH(ft) 10.0		DATUM NAVD 88	
		REMARKS None Encountered		GRID N 2960021	
				COORD E 677573	
				DATE START 9/3/19	
				DATE END 9/3/19	

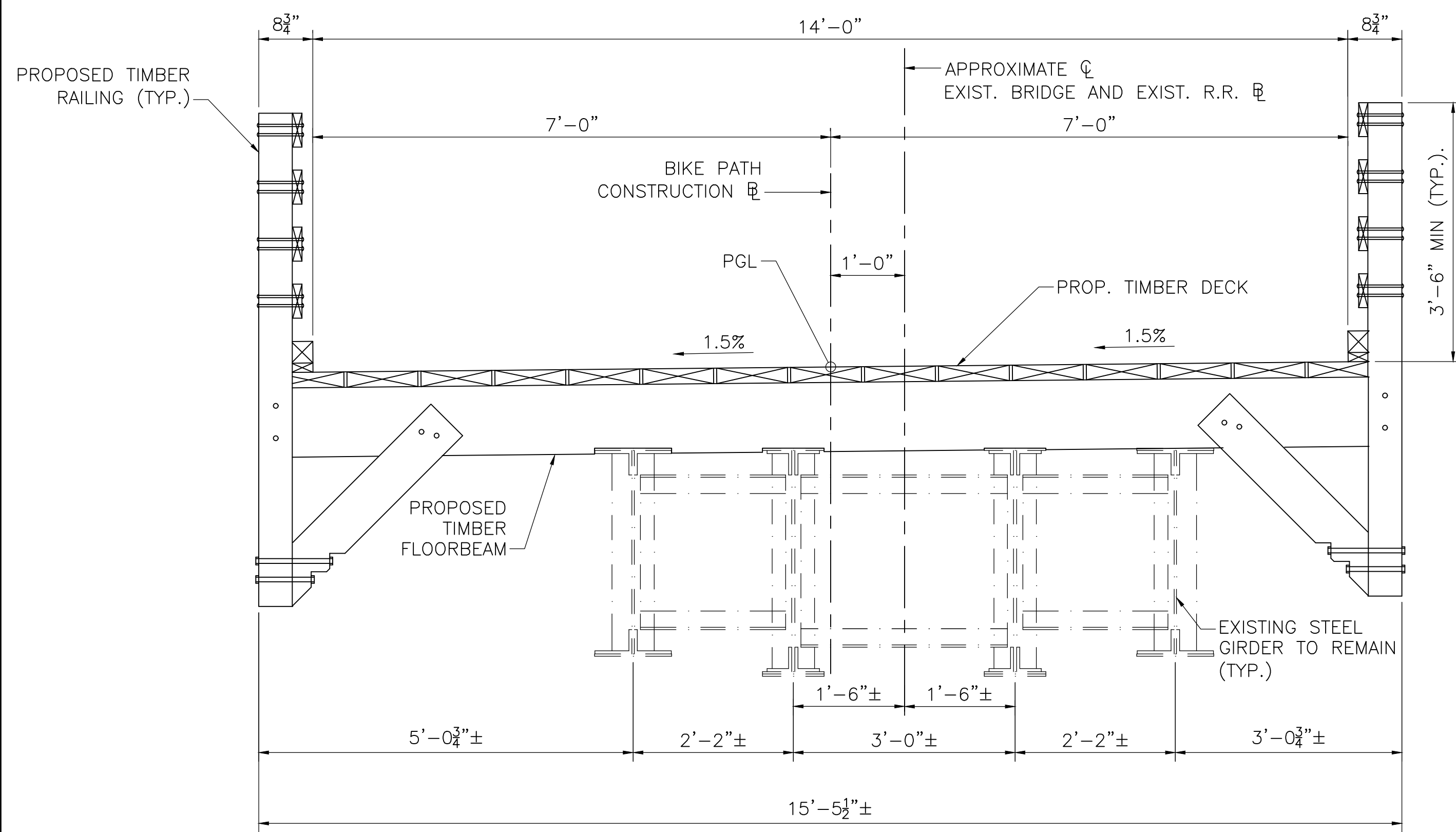
ELEV. (ft)	DEPTH (ft)	SAMPLE DATA	N-VALUE	SAMPLE NO.	DEPTH INTERVAL (ft)	PEN/REC (in)/(in)	PID (ppm)	SOIL AND ROCK DESCRIPTION	NOTES
140	0-2	2 3 2	5	S1	0 - 2	24/10		S1: (0-4") Topsoil. Dry, black, medium SAND, trace Gravel. (4-10") Dry, brown, fine SAND, trace Silt.	
140	2-4	1 3 3 4	6	S2	2 - 4	24/12		S2: Dry, loose, brown, medium to coarse SAND, little Gravel.	
135	4-6	3 3 3	6	S3	4 - 6	24/16		S3: Dry, loose, brown, fine to medium SAND, some Silt.	
135	6-8	3 3 3 5	7	S4	6 - 8	24/17		S4: Dry, loose, brown, fine to coarse SAND, little Silt.	
130	8-9.4	2 8 50/5"	50/5"	S5	8 - 9.4	17/12		S5: Dry, very dense, brown, medium to coarse SAND, little Gravel, trace Silt.	
130	10-10	50/0"	50/0"	S6	10 - 10	0/0		Bottom of Borehole at 10 feet.	1 2

Page 1: 0-35 feet. Each subsequent page displays 40 feet.

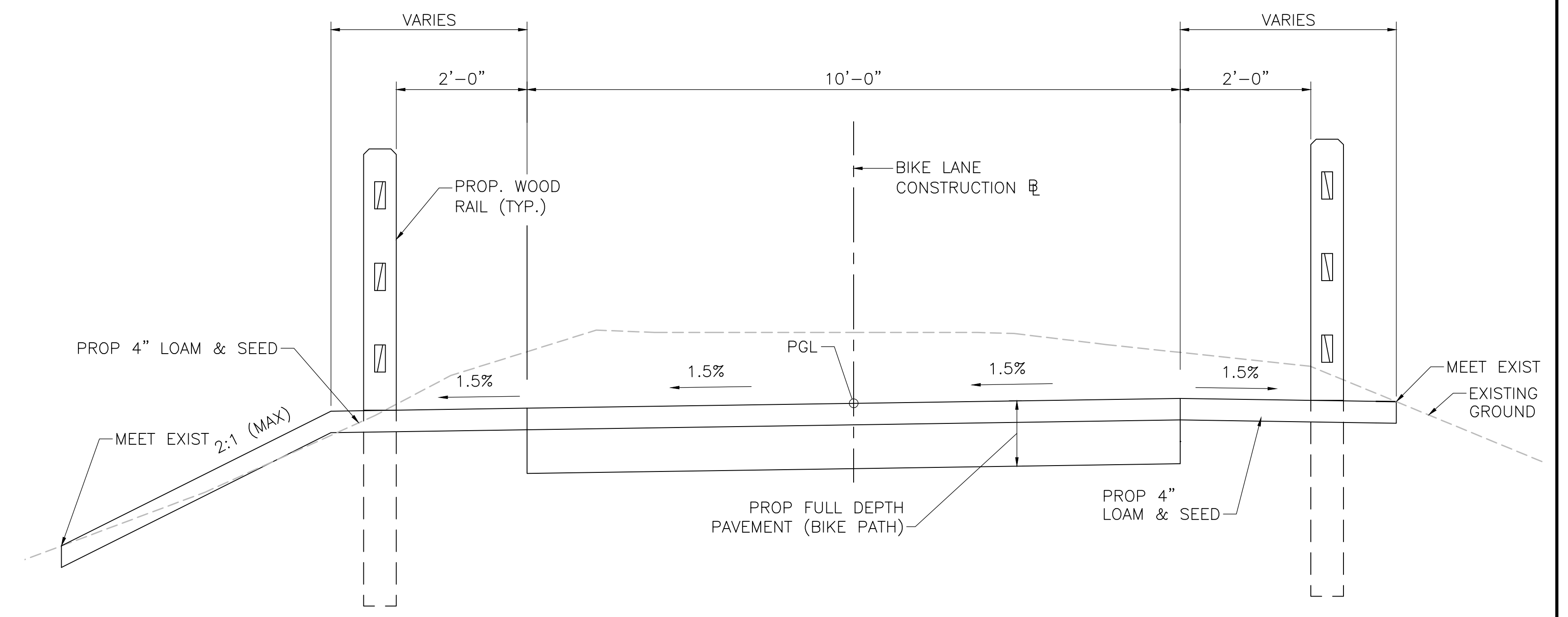
NOTES
1. Boring terminated at 10' due to an obstruction.
2. Boring offset 9' north and continued. See boring log BB-103B.

BORING NOTES:
SEE SHEET 2 FOR BORING NOTES.

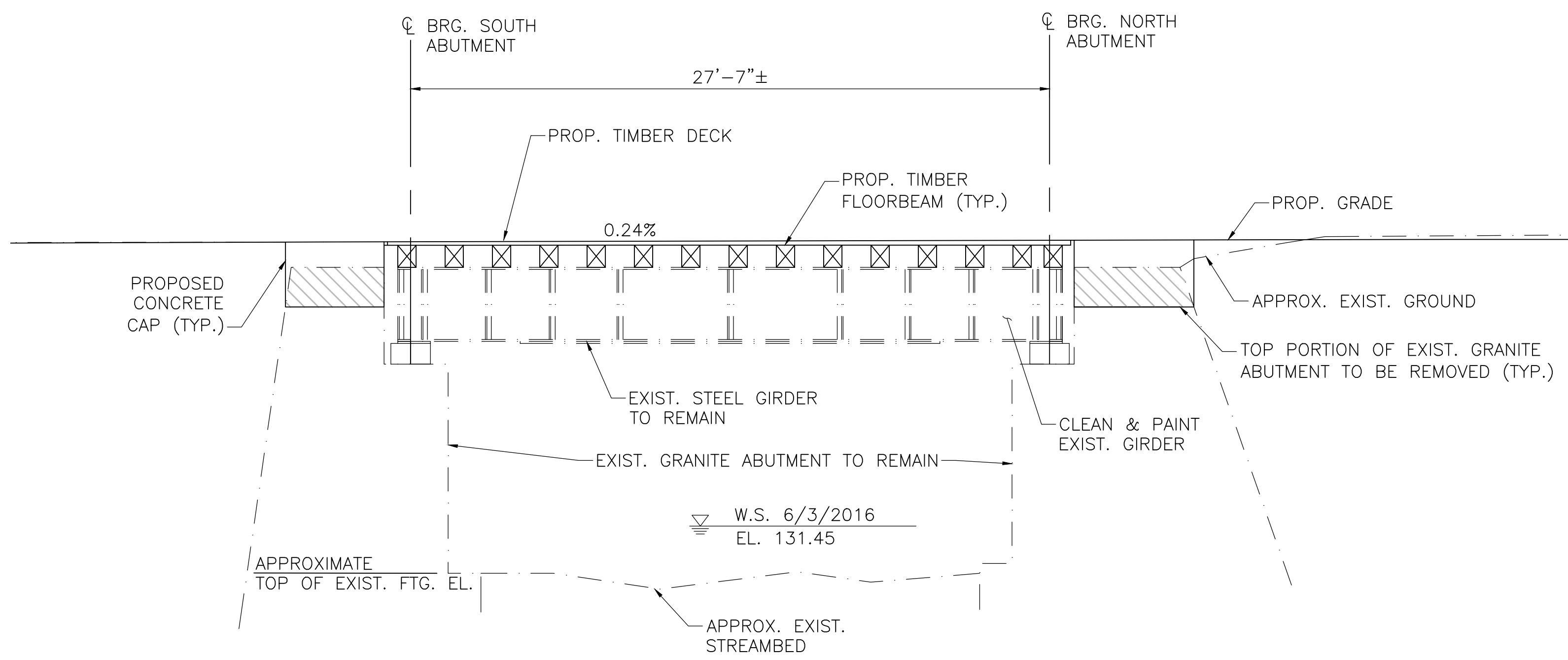




TRANSVERSE SECTION
SCALE: 3/4" = 1'-0"



APPROACH SECTION
SCALE: 1/4" = 1'-0"



LONGITUDINAL SECTION
SCALE: 1/4" = 1'-0"